

(FILE 'HOME' ENTERED AT 13:30:10 ON 14 DEC 2006)

FILE 'REGISTRY' ENTERED AT 13:30:22 ON 14 DEC 2006

L1           STRUCTURE UPLOADED  
L2           4 S L1  
L3           18 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 13:31:13 ON 14 DEC 2006

L4           36 S L3  
L5           0 S L4 AND LIBRARY  
L6           3 S L4 AND INFLAMM?  
L7           2 S L4 AND (NEURODEGEN? OR ALZHEIM? OR PARKINSON?)  
L8           10 S L4 AND (CANCER OR TUMOR OR ANTITUMOR OR NEOPLAS? OR CARCINOMA

FILE 'USPATFULL' ENTERED AT 13:34:58 ON 14 DEC 2006

L9           1 S L3

FILE 'HOME' ENTERED AT 13:30:10 ON 14 DEC 2006

=> file registry		SINCE FILE	TOTAL
COST IN U.S. DOLLARS		ENTRY	SESSION
FULL ESTIMATED COST		0.21	0.21

FILE 'REGISTRY' ENTERED AT 13:30:22 ON 14 DEC 2006  
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
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Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 13 DEC 2006 HIGHEST RN 915360-23-5  
DICTIONARY FILE UPDATES: 13 DEC 2006 HIGHEST RN 915360-23-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

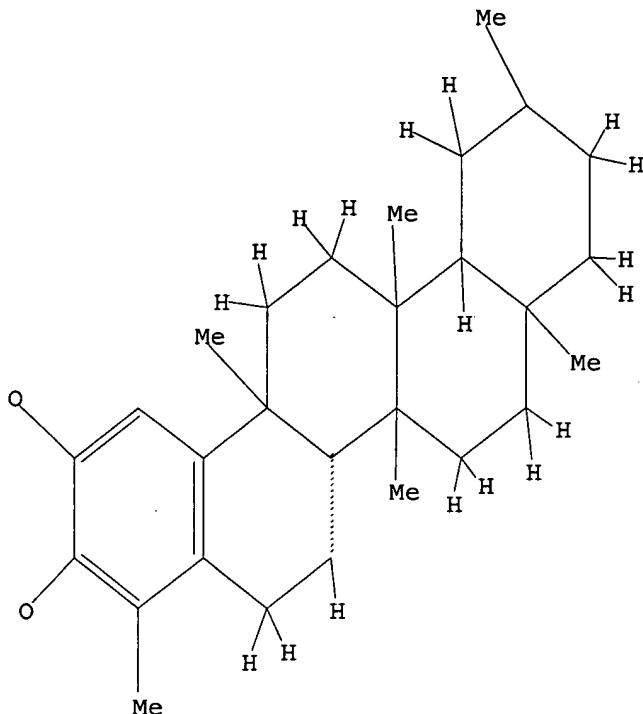
REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=>  
Uploading C:\Program Files\Stnexp\Queries\10773903generic.str

L1        STRUCTURE uploaded

=> d l1  
L1 HAS NO ANSWERS  
L1        STR



G1 H, OH

Structure attributes must be viewed using STN Express query preparation.

```
=> s 11
SAMPLE SEARCH INITIATED 13:30:42 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 841 TO ITERATE
```

```
100.0% PROCESSED 841 ITERATIONS 4 ANSWERS
SEARCH TIME: 00.00.01
```

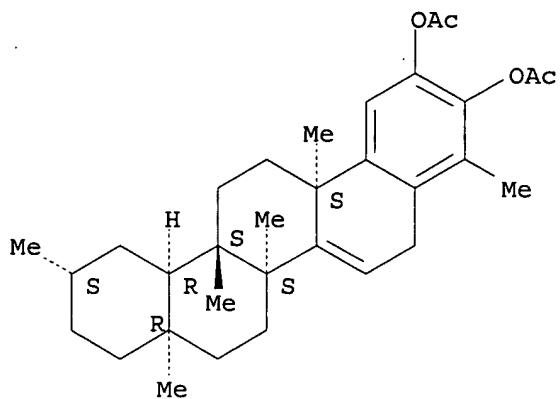
```
FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 15081 TO 18559
PROJECTED ANSWERS: 4 TO 200
```

L2 4 SEA SSS SAM L1

=> d 12 scan

```
L2 4 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN 24,25,26,30-Tetranoroleana-1,3,5(10),7-tetraene-2,3-diol, 9,13-dimethyl-,
diacetate, (9β,13α,14β,20β)- (9CI)
MF C32 H44 O4
```

Absolute stereochemistry.

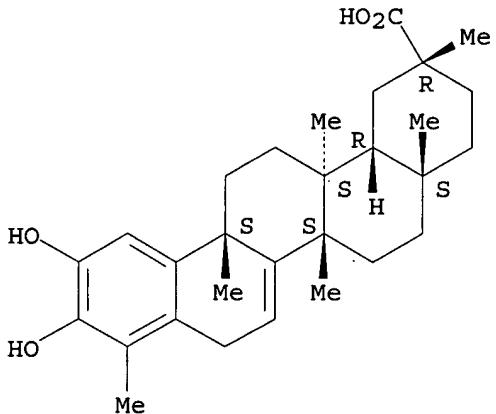


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1) :3

L2 4 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN  
 IN 24,25,26-Trinoroleana-1,3,5(10),7-tetraen-29-oic acid,  
 2,3-dihydroxy-9,13-dimethyl-, (9β,13α,14β,20α)-  
 (9CI)  
 MF C29 H40 O4

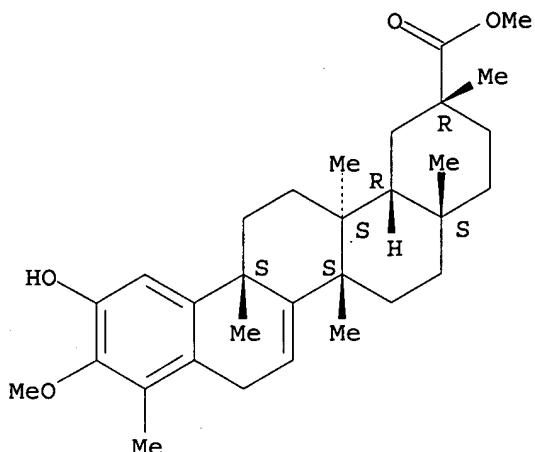
Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

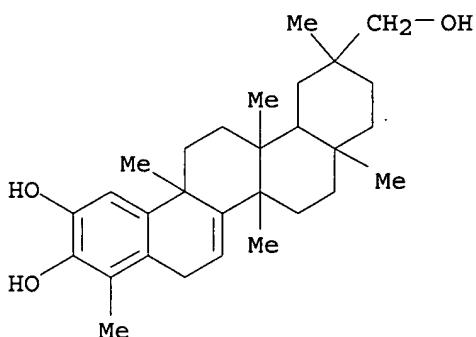
L2 4 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN  
 IN 24,25,26-Trinoroleana-1,3,5(10),7-tetraen-29-oic acid,  
 2-hydroxy-3-methoxy-9,13-dimethyl-, methyl ester,  
 (9β,13α,14β,20α)- (9CI)  
 MF C31 H44 O4

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L2 4 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN  
 IN 2-Picenemethanol, 1,2,3,4,4a,5,6,6a,8,12b,13,14,14a,14b-tetradecahydro-  
 10,11-dihydroxy-2,4a,6a,9,12b,14a-hexamethyl- (7CI)  
 MF C29 H42 O3



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

ALL ANSWERS HAVE BEEN SCANNED

```
=> s 11 sss full
FULL SEARCH INITIATED 13:31:07 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 16777 TO ITERATE
```

100.0% PROCESSED 16777 ITERATIONS
SEARCH TIME: 00.00.01

18 ANSWERS

L3 18 SEA SSS FUL L1

```
=> file caplus
COST IN U.S. DOLLARS
FULL ESTIMATED COST
```

SINCE FILE	TOTAL
ENTRY	SESSION
166.94	167.15

FILE 'CAPLUS' ENTERED AT 13:31:13 ON 14 DEC 2006

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE COVERS 1907 - 14 Dec 2006 VOL 145 ISS 25  
FILE LAST UPDATED: 13 Dec 2006 (20061213/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s 13  
L4 36 L3

=> s 14 and library  
80365 LIBRARY  
L5 0 L4 AND LIBRARY

=> s 14 and inflamm?  
262425 INFLAMM?  
L6 3 L4 AND INFLAMM?

=> d 16

L6 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 2004:934338 CAPLUS  
DN 141:388762  
TI Derivatives of pentacyclic nortriterpene quinone methides as compounds useful in the treatment of inflammatory, neurodegenerative, and neoplastic diseases  
IN Devlin, J. P.  
PA USA  
SO U.S. Pat. Appl. Publ., 4 pp.  
CODEN: USXXCO  
DT Patent  
LA English  
FAN.CNT 1  

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2004220267	A1	20041104	US 2004-773903	20040206
PRAI US 2003-445717P	P	20030207		
OS MARPAT 141:388762				

=> d 16 1-3 ti abs bib

L6 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN  
TI Derivatives of pentacyclic nortriterpene quinone methides as compounds useful in the treatment of inflammatory, neurodegenerative, and neoplastic diseases  
AB The uses of celastrol and pristimerin derivs. in the treatment of inflammatory, neurodegenerative and neoplastic diseases are

disclosed, including dihydro derivs. of celastrol and pristimerin, such as dihydrocelastrol and dihydropristimerin and their diacetates.

AN 2004:934338 CAPLUS  
DN 141:388762  
TI Derivatives of pentacyclic nortriterpene quinone methides as compounds useful in the treatment of inflammatory, neurodegenerative, and neoplastic diseases  
IN Devlin, J. P.  
PA USA  
SO U.S. Pat. Appl. Publ., 4 pp.  
CODEN: USXXCO  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004220267	A1	20041104	US 2004-773903	20040206
PRAI	US 2003-445717P	P	20030207		
OS	MARPAT 141:388762				

L6 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN  
TI Apoptosis induction in HL-60 cells and inhibition of topoisomerase II by triterpene Celastrol  
AB Celastrol, which is a triterpene purified from Celastraceae plants, has anticancer and anti-inflammatory activities. In this study, the authors investigated to clarify whether Celastrol can induce apoptosis in a human leukemia HL-60 model system. Celastrol was found to induce apoptosis, and the rank order of the potency of Celastrol and its derivs. to induce internucleosomal DNA fragmentation was found to be Celastrol>Cela-H>the other derivs. = vehicle control. Many anticancer agents are known to possess the ability to inhibit topoisomerase II, so the inhibitory activities of Celastrol and its derivs. on topoisomerase II were also explored. The rank order of the inhibitory activity was found to be Celastrol>etoposide>Cela-H, indicating that the apoptosis-inducing activities of Cela derivs. correspond to their inhibitory activities on topoisomerase II. These data suggested that Celastrol may cause its effects such as anticancer activity by the mechanism of apoptosis along with topoisomerase II inhibition.

AN 2003:801130 CAPLUS  
DN 140:192391  
TI Apoptosis induction in HL-60 cells and inhibition of topoisomerase II by triterpene Celastrol  
AU Nagase, Masahiro; Oto, Jinsei; Sugiyama, Sin; Yube, Kouichi; Takaishi, Yoshihisa; Sakato, Nobuo  
CS Department of Life Sciences, Faculty of Agriculture, Kagawa University, Kagawa, 761-0795, Japan  
SO Bioscience, Biotechnology, and Biochemistry (2003), 67(9), 1883-1887  
CODEN: BBBIEJ; ISSN: 0916-8451  
PB Japan Society for Bioscience, Biotechnology, and Agrochemistry  
DT Journal  
LA English

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN  
TI Novel cytokine release inhibitors. Part II: steroids  
AB The authors studied the structure activity relationship of steroidal derivs. derived from testosterone as IL-1 $\beta$  release inhibitors in human monocytes stimulated with LPS. Significant improvement of antiinflammatory activities was measured.  
AN 1998:713038 CAPLUS  
DN 130:60599  
TI Novel cytokine release inhibitors. Part II: steroids  
AU He, Wei; Huang, Fu-Chih; Morytko, Michael; Jariwala, Navin; Yu, Kin-Tak

CS Department of Medicinal Chemistry, Department of Inflammation Biology,  
Rhone-Poulenc Rorer Central Research, Collegeville, PA, 19426, USA  
SO Bioorganic & Medicinal Chemistry Letters (1998), 8(20), 2825-2828  
CODEN: BMCLE8; ISSN: 0960-894X  
PB Elsevier Science Ltd.  
DT Journal  
LA English

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s 14 and (neurodegen? or Alzheim? or Parkinson?)  
22894 NEURODEGEN?  
42555 ALZHEIM?  
25436 PARKINSON?  
L7 2 L4 AND (NEURODEGEN? OR ALZHEIM? OR PARKINSON?)

=> d 17 1-2 ti abs bib

L7 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN  
TI Celastrols as Inducers of the Heat Shock Response and Cytoprotection  
AB Alterations in protein folding and the regulation of conformational states have become increasingly important to the functionality of key mols. in signaling, cell growth, and cell death. Mol. chaperones, because of their properties in protein quality control, afford conformational flexibility to proteins and serve to integrate stress-signaling events that influence aging and a range of diseases including cancer, cystic fibrosis, amyloidoses, and neurodegenerative diseases. We describe here characteristics of celastrol, a quinone methide triterpene and an active component from Chinese herbal medicine identified in a screen of bioactive small mols. that activates the human heat shock response. From a structure/function examination, the celastrol structure is remarkably specific and activates heat shock transcription factor 1 (HSF1) with kinetics similar to those of heat stress, as determined by the induction of HSF1 DNA binding, hyperphosphorylation of HSF1, and expression of chaperone genes. Celastrol can activate heat shock gene transcription synergistically with other stresses and exhibits cytoprotection against subsequent exposures to other forms of lethal cell stress. These results suggest that celastrols exhibit promise as a new class of pharmacol. active regulators of the heat shock response.

AN 2004:1131225 CAPLUS  
DN 142:211411  
TI Celastrols as Inducers of the Heat Shock Response and Cytoprotection  
AU Westerheide, Sandy D.; Bosman, Joshua D.; Mbadugha, Bessie N. A.; Kawahara, Tiara L. A.; Matsumoto, Gen; Kim, Soojin; Gu, Wenxin; Devlin, John P.; Silverman, Richard B.; Morimoto, Richard I.  
CS Department of Biochemistry, Molecular Biology and Cell Biology, Rice Institute for Biomedical Research, Northwestern University, Evanston, IL, 60208, USA  
SO Journal of Biological Chemistry (2004), 279(53), 56053-56060  
CODEN: JBCHA3; ISSN: 0021-9258  
PB American Society for Biochemistry and Molecular Biology  
DT Journal  
LA English

RE.CNT 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN  
TI Derivatives of pentacyclic nortriterpene quinone methides as compounds useful in the treatment of inflammatory, neurodegenerative, and neoplastic diseases  
AB The uses of celastrol and pristimerin derivs. in the treatment of inflammatory, neurodegenerative and neoplastic diseases are disclosed, including dihydro derivs. of celastrol and pristimerin, such as

dihydrocelastrol and dihydropristimerin and their diacetates.  
 AN 2004:934338 CAPLUS  
 DN 141:388762  
 TI Derivatives of pentacyclic nortriterpene quinone methides as compounds useful in the treatment of inflammatory, neurodegenerative, and neoplastic diseases  
 IN Devlin, J. P.  
 PA USA  
 SO U.S. Pat. Appl. Publ., 4 pp.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2004220267	A1	20041104	US 2004-773903	20040206
PRAI US 2003-445717P	P	20030207		
OS MARPAT 141:388762				

=> s 14 and (cancer or tumor or antitumor or neoplas? or carcinoma or sarcoma or leukemia)

300059 CANCER  
 392109 TUMOR  
 213961 ANTITUMOR  
 473802 NEOPLAS?  
 152723 CARCINOMA  
 38139 SARCOMA  
 101069 LEUKEMIA

L8 10 L4 AND (CANCER OR TUMOR OR ANTITUMOR OR NEOPLAS? OR CARCINOMA OR SARCOMA OR LEUKEMIA)

=> d 18 1-10 ti

L8 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
 TI New phenolic triterpenes from Maytenus blepharodes. Semisynthesis of 6-deoxoblepharodol from pristimerin

L8 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
 TI Celastrols as Inducers of the Heat Shock Response and Cytoprotection

L8 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
 TI Derivatives of pentacyclic nortriterpene quinone methides as compounds useful in the treatment of inflammatory, neurodegenerative, and neoplastic diseases

L8 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
 TI Apoptosis induction in HL-60 cells and inhibition of topoisomerase II by triterpene Celastrol

L8 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
 TI Catalytic inhibition of topoisomerase II $\alpha$  by demethylzeylasterone, a 6-oxophenolic triterpenoid from Kokoona zeylanica

L8 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
 TI Immunosuppressive terpenoids from extracts of Tripterygium wilfordii

L8 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
 TI Novel cytokine release inhibitors. Part III: truncated analogs of tripteterine

L8 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
 TI Triterpenoid inhibitors of interleukin-1 secretion and tumor -promotion from Tripterygium wilfordii var. regelii

L8 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
TI Structures of triterpene dimers and sesquiterpene polyesters from South American medicinal plants belonged to Maytenus sp.

L8 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
TI Biological study of triterpene quinones from Celastraceae

=> d 18 1-10 ti abs bib

L8 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
TI New phenolic triterpenes from Maytenus blepharodes. Semisynthesis of 6-deoxoblepharodol from pristimerin  
AB Four new phenolic triterpenes with a 24-nor-D:A-friedoleane skeleton, isoblepharodol, 7-oxoblepharodol, blepharotriol and 6-deoxoblepharodol, were isolated from Maytenus blepharodes. Their structures were elucidated on the basis of spectroscopic anal., including homo and heteronuclear correlation NMR expts. (COSY, ROESY, HSQC, and HMBC). The semisynthesis of 6-deoxoblepharodol and its epimer at C-8 was achieved by catalytic reduction of pristimerin, a quinone-methide triterpene present in the plant. The biosynthetic formation of the phenolic triterpenes isolated from this species is also discussed. The compds. were assayed for antimicrobial and cytotoxic activities.

AN 2005:130783 CAPLUS  
DN 142:370753

TI New phenolic triterpenes from Maytenus blepharodes. Semisynthesis of 6-deoxoblepharodol from pristimerin  
AU Rodriguez, Felix M.; Lopez, Manuel R.; Jimenez, Ignacio A.; Moujir, Laila; Ravelo, Angel G.; Bazzocchi, Isabel L.  
CS Instituto Canario de Investigacion del Cancer, Instituto Universitario de Bio-Organica Antonio Gonzalez, Universidad de La Laguna, Tenerife, 38206, Spain

SO Tetrahedron (2005), 61(9), 2513-2519  
CODEN: TETRAB; ISSN: 0040-4020

PB Elsevier B.V.  
DT Journal  
LA English

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 10 CAPLUS . COPYRIGHT 2006 ACS on STN  
TI Celastrols as Inducers of the Heat Shock Response and Cytoprotection  
AB Alterations in protein folding and the regulation of conformational states have become increasingly important to the functionality of key mols. in signaling, cell growth, and cell death. Mol. chaperones, because of their properties in protein quality control, afford conformational flexibility to proteins and serve to integrate stress-signaling events that influence aging and a range of diseases including cancer, cystic fibrosis, amyloidoses, and neurodegenerative diseases. We describe here characteristics of celastrol, a quinone methide triterpene and an active component from Chinese herbal medicine identified in a screen of bioactive small mols. that activates the human heat shock response. From a structure/function examination, the celastrol structure is remarkably specific and activates heat shock transcription factor 1 (HSF1) with kinetics similar to those of heat stress, as determined by the induction of HSF1 DNA binding, hyperphosphorylation of HSF1, and expression of chaperone genes. Celastrol can activate heat shock gene transcription synergistically with other stresses and exhibits cytoprotection against subsequent exposures to other forms of lethal cell stress. These results suggest that celastrols exhibit promise as a new class of pharmacol. active regulators of the heat shock response.

AN 2004:1131225 CAPLUS  
DN 142:211411

TI Celastrols as Inducers of the Heat Shock Response and Cytoprotection  
AU Westerheide, Sandy D.; Bosman, Joshua D.; Mbadugha, Bessie N. A.;  
Kawahara, Tiara L. A.; Matsumoto, Gen; Kim, Soojin; Gu, Wenxin; Devlin,  
John P.; Silverman, Richard B.; Morimoto, Richard I.  
CS Department of Biochemistry, Molecular Biology and Cell Biology, Rice  
Institute for Biomedical Research, Northwestern University, Evanston, IL,  
60208, USA  
SO Journal of Biological Chemistry (2004), 279(53), 56053-56060  
CODEN: JBCHA3; ISSN: 0021-9258  
PB American Society for Biochemistry and Molecular Biology  
DT Journal  
LA English  
RE.CNT 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
TI Derivatives of pentacyclic nortriterpene quinone methides as compounds  
useful in the treatment of inflammatory, neurodegenerative, and  
neoplastic diseases  
AB The uses of celastrol and pristimerin derivs. in the treatment of  
inflammatory, neurodegenerative and neoplastic diseases are  
disclosed, including dihydro derivs. of celastrol and pristimerin, such as  
dihydrocelastrol and dihydropristimerin and their diacetates.  
AN 2004:934338 CAPLUS  
DN 141:388762  
TI Derivatives of pentacyclic nortriterpene quinone methides as compounds  
useful in the treatment of inflammatory, neurodegenerative, and  
neoplastic diseases  
IN Devlin, J. P.  
PA USA  
SO U.S. Pat. Appl. Publ., 4 pp.  
CODEN: USXXCO  
DT Patent  
LA English  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2004220267	A1	20041104	US 2004-773903	20040206
PRAI US 2003-445717P	P	20030207		
OS MARPAT 141:388762				

L8 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
TI Apoptosis induction in HL-60 cells and inhibition of topoisomerase II by  
triterpene Celastrol  
AB Celastrol, which is a triterpene purified from Celastraceae plants, has  
anticancer and anti-inflammatory activities. In this study, the authors  
investigated to clarify whether Celastrol can induce apoptosis in a human  
leukemia HL-60 model system. Celastrol was found to induce  
apoptosis, and the rank order of the potency of Celastrol and its derivs.  
to induce internucleosomal DNA fragmentation was found to be  
Celastrol>Cela-H>the other derivs. = vehicle control. Many  
anticancer agents are known to possess the ability to inhibit  
topoisomerase II, so the inhibitory activities of Celastrol and its  
derivs. on topoisomerase II were also explored. The rank order of the  
inhibitory activity was found to be Celastrol>etoposide>Cela-H, indicating  
that the apoptosis-inducing activities of Cela derivs. correspond to their  
inhibitory activities on topoisomerase II. These data suggested that  
Celastrol may cause its effects such as anticancer activity by the  
mechanism of apoptosis along with topoisomerase II inhibition.  
AN 2003:801130 CAPLUS  
DN 140:192391  
TI Apoptosis induction in HL-60 cells and inhibition of topoisomerase II by  
triterpene Celastrol  
AU Nagase, Masahiro; Oto, Jinsei; Sugiyama, Sin; Yube, Kouichi; Takaishi,

Yoshihisa; Sakato, Nobuo  
CS Department of Life Sciences, Faculty of Agriculture, Kagawa University,  
Kagawa, 761-0795, Japan  
SO Bioscience, Biotechnology, and Biochemistry (2003), 67(9), 1883-1887  
CODEN: BBBIEJ; ISSN: 0916-8451  
PB Japan Society for Bioscience, Biotechnology, and Agrochemistry  
DT Journal  
LA English

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
TI Catalytic inhibition of topoisomerase II $\alpha$  by demethylzeylasterone, a  
6-oxophenolic triterpenoid from Kokoona zeylanica  
AB In a study to evaluate celastroloids as potential anticancer agents,  
demethylzeylasterone (5), a 6-oxophenolic triterpenoid from Kokoona  
zeylanica, was found to be an inhibitor of the enzyme topoisomerase  
II $\alpha$  ( $IC_{50} = 17.6 \mu M$ ). Studies of the relationship of this  
inhibitor to both DNA and the enzyme resulted in 5 being classified as a  
"catalytic inhibitor" of topoisomerase II. Demethylzeylasterone  
selectively inhibits the growth of the breast cancer cell line  
MCF-7 ( $IC_{50} = 12.5 \mu M$ ) without inhibiting the growth of non-small cell  
lung cancer (NCI-H460) and CNS glioma (SF-268) cell lines. This  
is the first report of topoisomerase II inhibitory activity in a  
celastroloid.

AN 2001:716938 CAPLUS  
DN 136:31410

TI Catalytic inhibition of topoisomerase II $\alpha$  by demethylzeylasterone, a  
6-oxophenolic triterpenoid from Kokoona zeylanica  
AU Furbacher, Todd R.; Gunatilaka, A. A. Leslie  
CS Southwest Center for Natural Products Research and Commercialization  
Office of Arid Lands Studies, College of Agriculture and Life Sciences  
University of Arizona, Tucson, AZ, 85706-6800, USA  
SO Journal of Natural Products (2001), 64(10), 1294-1296  
CODEN: JNPRDF; ISSN: 0163-3864

PB American Chemical Society  
DT Journal  
LA English

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
TI Immunosuppressive terpenoids from extracts of Tripterygium wilfordii  
GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The clin. used extract (TII) of Tripterygium wilfordii Hook f. gave 19 new  
compds., including five kaurane diterpenes (e.g. I), one manoyl oxide  
diterpene (II), and one abietane diterpene (III), three ursene triterpenes  
(e.g. IV), six oleanane triterpenes (e.g. V), and three friedelane  
triterpenes (e.g. VI), as well as 15 known compds. Their structures were  
elucidated by spectroscopy and X-ray anal. The main components that are  
responsible for the therapeutic effect of TII were identified based on  
the screening of isolated compds. and other compds. reported in previous  
papers.

AN 2001:709287 CAPLUS  
DN 136:51067

TI Immunosuppressive terpenoids from extracts of Tripterygium wilfordii  
AU Duan, H.; Takaishi, Y.; Momota, H.; Ohmoto, Y.; Taki, T.; Tori, M.;  
Takaoka, S.; Jia, Y.; Li, D.

CS University of Tokushima, Faculty of Pharmaceutical Sciences, Tokushima,  
770-8505, Japan  
SO Tetrahedron (2001), 57(40), 8413-8424  
CODEN: TETRAB; ISSN: 0040-4020  
PB Elsevier Science Ltd.  
DT Journal  
LA English

RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
TI Novel cytokine release inhibitors. Part III: truncated analogs of tripterine  
AB Truncated analogs of tripterine as cytokine (IL-1 $\alpha$ , IL-1 $\beta$ , TNF- $\alpha$ , IL-6, and IL-8) release inhibitors are discussed.  
AN 1999:50750 CAPLUS  
DN 130:231906  
TI Novel cytokine release inhibitors. Part III: truncated analogs of tripterine  
AU He, Wei; Huang, Fu-Chih; Gavai, Ashvin; Chan, Wan K.; Amato, George; Yu, Kin-Tak; Zilberstein, Asher  
CS Department of Medicinal Chemistry, NW17 Rhone-Poulenc Rorer Central Research, Collegeville, PA, 19426, USA  
SO Bioorganic & Medicinal Chemistry Letters (1998), 8(24), 3659-3664  
CODEN: BMCLE8; ISSN: 0960-894X  
PB Elsevier Science Ltd.  
DT Journal  
LA English

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
TI Triterpenoid inhibitors of interleukin-1 secretion and tumor -promotion from *Tripterygium wilfordii* var. *regelii*  
AB Three new triterpenoids, 2,3,22 $\beta$ -trihydroxy-21-oxo-24-nor-D:A-friedooleana-1,3,5(10)-triene, 2 $\alpha$ ,6 $\beta$ -dihydroxy-3-oxo-24-nor-D:A-friedooleana-4-ene-29-oic acid and 2,3,7-trihydroxy-6-oxo-24-nor-D:A-friedooleana-1,3,5(10),7-tetraene-29-oic acid, named rheol A, B and C, and nine known triterpenoids were isolated from *T. wilfordii* var. *regelii*. Their structures were established on the basis of the chemical reactions and spectroscopic evidence. Isolated compds. and derivs. were observed to inhibit Epstein-Barr virus early antigen activation and showed potent inhibitory activities against interleukin-1 $\alpha$  and  $\beta$  release from human peripheral mononuclear cells.  
AN 1997:423692 CAPLUS  
DN 127:173813  
TI Triterpenoid inhibitors of interleukin-1 secretion and tumor -promotion from *Tripterygium wilfordii* var. *regelii*  
AU Takaishi, Yoshihisa; Wariishi, Noriko; Tateishi, Hideo; Kawazoe, Kazuyoshi; Nakano, Kimiko; Ono, Yukihisa; Tokuda, Haruyuki; Nishino, Hoyoku; Iwashima, Akio  
CS Faculty of Pharmaceutical Sciences, University of Tokushima, Tokushima, 770, Japan  
SO Phytochemistry (1997), 45(5), 969-974  
CODEN: PYTCAS; ISSN: 0031-9422  
PB Elsevier  
DT Journal  
LA English

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN  
TI Structures of triterpene dimers and sesquiterpene polyesters from South American medicinal plants belonged to *Maytenus* sp.

AB During the authors' studies on biol. active compds. in South American medicinal plants, the authors were interested in plants of the genus Maytenus, widely used as folk medicines. In this work, three medicinal plants belonged to Maytenus species were examined. From *M. ilicifolia*, which called "cangorosa" in Paraguay, four triterpene dimers (4-7), ten oligo-nicotinated sesquiterpene polyesters (8-17), three macrocyclic sesquiterpene pyridine alkaloids (18-20) and three other compds. were isolated. From *M. ebenifolia*, named "chuchuhuasi", which is used as for the treatments of rheumatism in Peru, twelve macrocyclic sesquiterpene pyridine alkaloids were isolated. Then from *M. chuchuhuasca*, obtained as "xuxua" at Brazil, used for the treatment of skin cancer, four triterpene dimers, two macrocyclic sesquiterpene pyridine alkaloids, along with an aromatic triterpene were isolated. These structures were determined by means of <sup>1</sup>H and <sup>13</sup>C NMR spectroscopic studies mainly 2D expts., MS, IR, UV and CD spectra. Triterpene dimers, which have cytotoxic activities against tumor cell lines, were characteristic components of these plants, and were consisted of pristimerin or tingenone type quinoid-triterpenes, and two of them were related to be atropisomer separated by a barrier of 32.8 kcal/mol. Oligo-nicotinated sesquiterpene polyesters contained two or three nicotinyl groups in dihydroagarofuran skeleton. Macrocylic sesquiterpene pyridine alkaloids possess either a fifteen- or sixteen-membered ring structure in their mol., and the flexibilities of these ring systems were evaluated by measuring the spin-lattice relaxation time, T<sub>1</sub>, by <sup>13</sup>C NMR spectroscopy.

AN 1994:517451 CAPLUS

DN 121:117451

TI Structures of triterpene dimers and sesquiterpene polyesters from South American medicinal plants belonged to Maytenus sp.

AU Itokawa, H.; Shirota, O.; Morita, H.; Takeya, K.; Iitaka, Y.

CS Tokyo Coll. Pharm., Japan

SO Tennen Yuki Kagobutsu Toronkai Koen Yoshishu (1993), 35th, 614-21

CODEN: TYKYDS

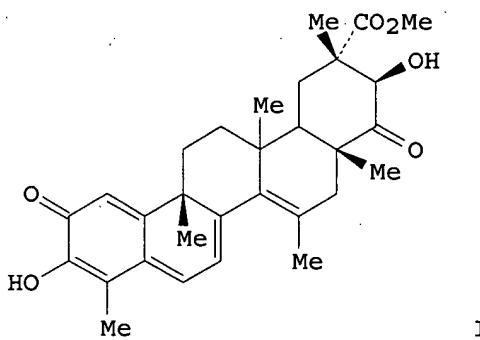
DT Journal

LA English

L8 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2006 ACS on STN

TI Biological study of triterpene quinones from Celastraceae

GI



AB The antitumor and antibacterial activities of 11 triterpene quinones from *Maytenus horrida* and *Rzedowskia tolantongensis* were studied in cultures of HeLa cells and several bacteria, resp. Netzahualcoyone (I) was the most active antitumor agent. The antibacterial activity was clearly related to the structural features of ring E.

AN 1989:264 CAPLUS

DN 110:264

TI Biological study of triterpene quinones from Celastraceae

AU Gonzales, A. G.; Ravelo, A. G.; Bazzocchi, I. L.; Jimenes, J.; Gonzales,

C. M.; Luis, J. G.; Ferro, E. A.; Gutierrez, A.; Moujir, L.; De las Heras, F. G.  
CS Cent. Prod. Nat. Org. Antonio Gonzalez, Univ. Laguna, Tenerife, Spain  
SO Farmaco, Edizione Scientifica (1988), 43(6), 501-5  
CODEN: FRPSAX; ISSN: 0430-0920  
DT Journal  
LA English

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=> s 13  
L9 1 L3

=> d 19 ti abs bib

L9 ANSWER 1 OF 1 USPATFULL on STN  
TI Derivatives of pentacyclic nortriterpene quinone methides as compounds useful in the treatment of inflammatory, neurodegenerative, and neoplastic diseases  
AB The uses of celastrol and pristimerin derivatives in the treatment of inflammatory, neurodegenerative and neoplastic diseases are disclosed, including dihydro derivatives of celastrol and pristimerin, such as dihydrocelastrol and dihydropristimerin and their diacetates.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AN 2004:280966 USPATFULL  
TI Derivatives of pentacyclic nortriterpene quinone methides as compounds useful in the treatment of inflammatory, neurodegenerative, and neoplastic diseases  
IN Devlin, J. P., Bridgewater, CT, UNITED STATES  
PI US 2004220267 A1 20041104  
AI US 2004-773903 A1 20040206 (10)  
PRAI US 2003-445717P 20030207 (60)  
DT Utility  
FS APPLICATION  
LREP J. P. Devlin, Gaia Chemical, 23 George Washington Plaza, Gaylordsville, CT, 06755  
CLMN Number of Claims: 6  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 215  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.